

April 2015 Climate Review for Puerto Rico and the U.S. Virgin Islands

...Based on data received until May 10th...

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Synopsis

A fair and stable weather pattern prevailed across the local islands during April with mostly clear skies and a few locally induced showers. This pattern resulted in an average rainfall total of 3.33 inches, which is 1.52 inches below normal for Puerto Rico.

In terms of temperature, the islandwide mean temperature was 76.9°F which is approximately 1.1°F warmer than the 30-year. The highest maximum temperature recorded this month was 98°F at Levittown on 04/27, and the lowest minimum temperature was 50°F on 4/22 at Toro Negro. Overall, April can be described as a dry and hot month islandside.

Statistically, the average maximum temperature at the Luis Muñoz Marín International Airport (TJSJ) in San Juan was approximately 1.6°F warmer than the 30-year. The average temperature was below normal 20% of the month; while normal temperatures were observed 30% of the month. Not surprising, April 2015 ended as the 4th warmest April on record at TJSJ.

Across the U.S. Virgin Islands, the mean temperature at Henry E. Rohlsen Airport (TISX) in Saint Croix and Cyril King Airport (TIST) in Saint Thomas was 80.8 and 80.4°F, which is 0.8 above normal and 0.2°F below normal respectively. In terms of precipitation, a rainfall total of 1.38 inches was reported at TJSJ, which is 3.30 inches below normal. Monthly rainfall totals at TIST and TISX were 1.08 and 0.59 inches, which are 1.66 and 1.54 inches below normal respectively. April 2015 ended as the 8th and 7th driest April on record at TIST and TISX.

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Data retrieved from AHPS, RAWs, CoCoRaHS, COOP stations and primary climatological data sites

RAINFALL

Islandwide climate record period: 1940 to 2015

San Juan Metro Area climate record period: 1898 to 2015 (Primary climatological site)

Cyril E. King Airport/St Thomas climate record period: 1953 to 2015 (Primary climatological site)

Henry E. Rohlsen Airport/St Croix climate record period: 1951 to 2015 (Primary climatological site)

Following WMO criteria: Less than 10% of missing values

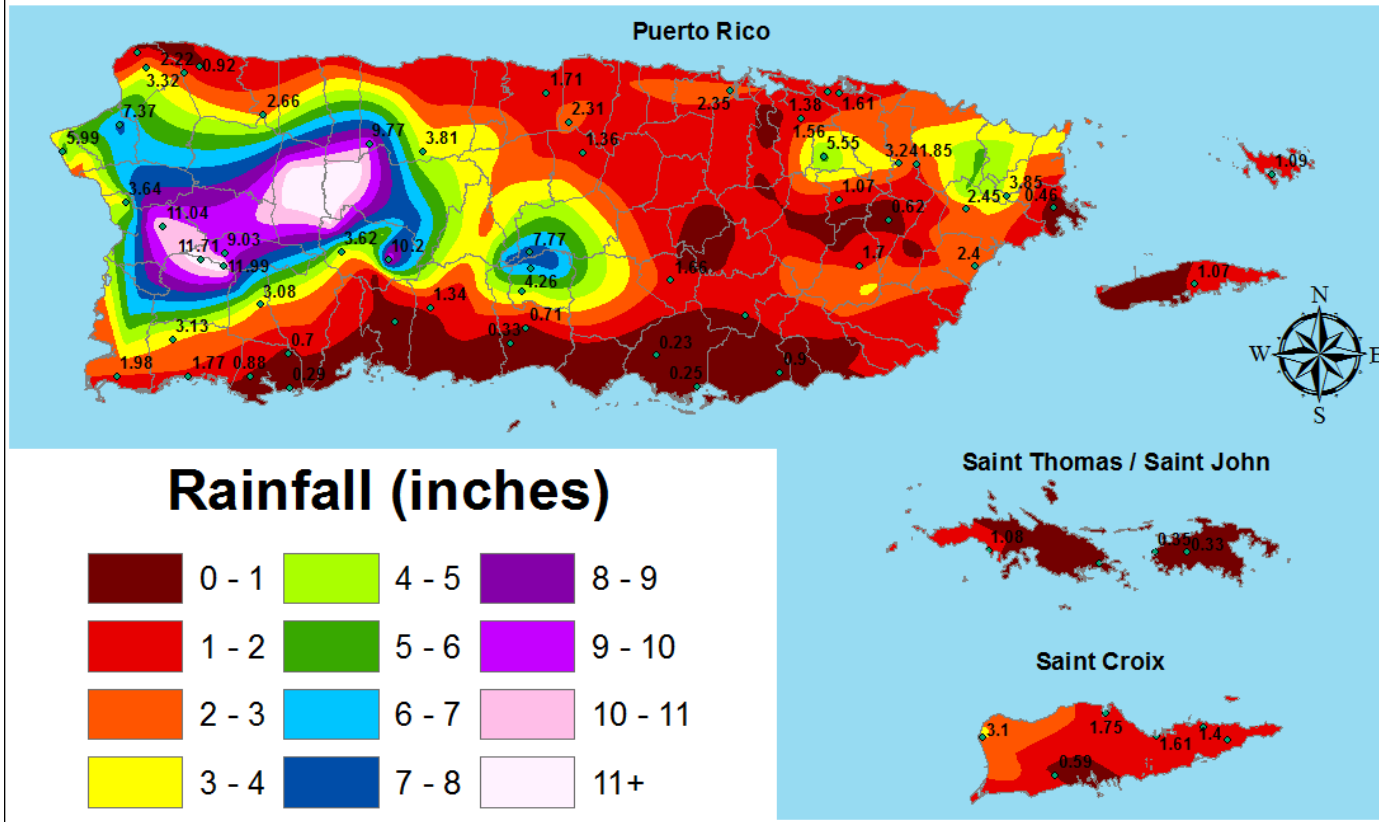


Click on image to enlarge

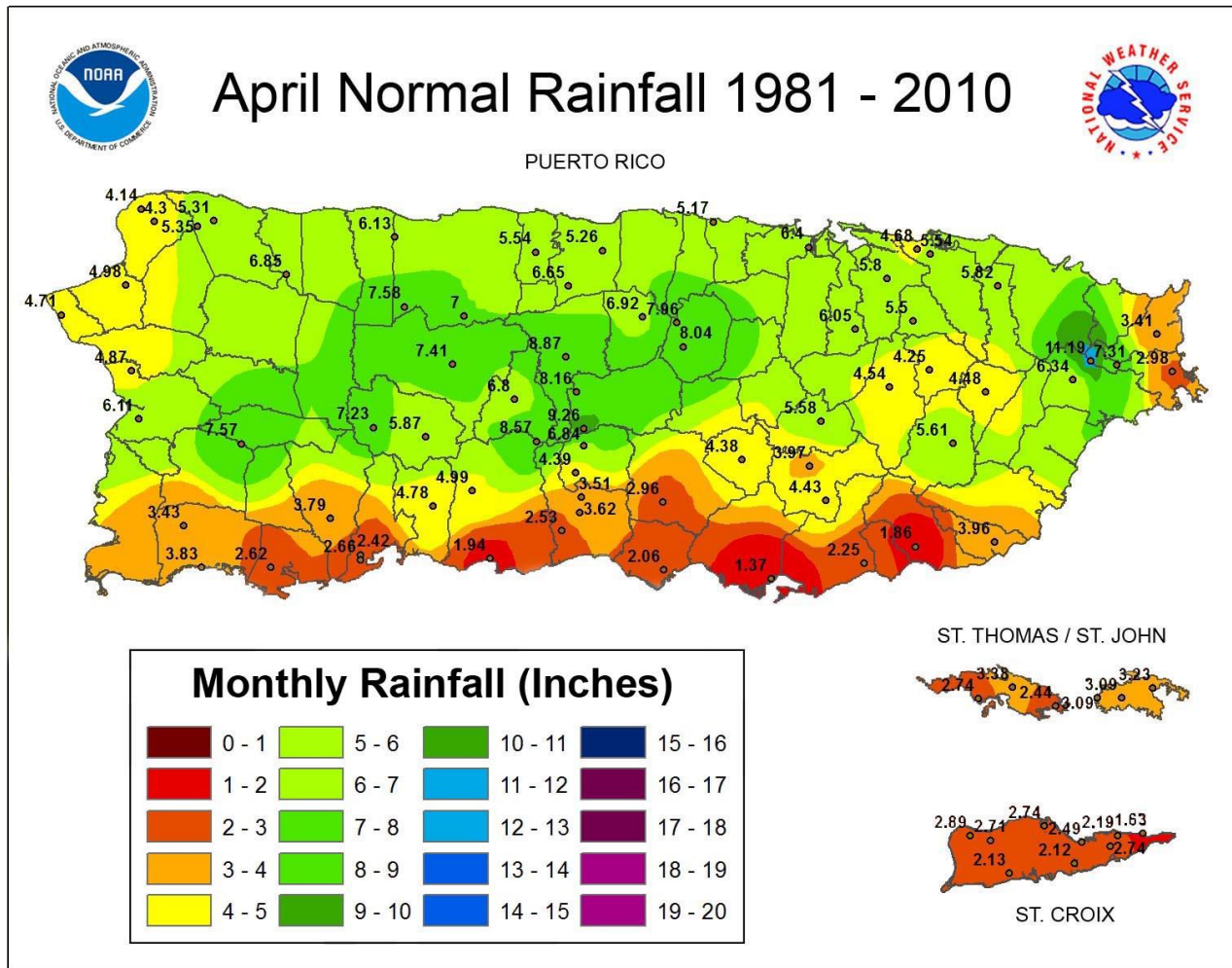


2015 April Observed Rainfall

Data Source: COOP, RAWS, CoCoRaHS
National Weather Service WFO San Juan
Data is Preliminary



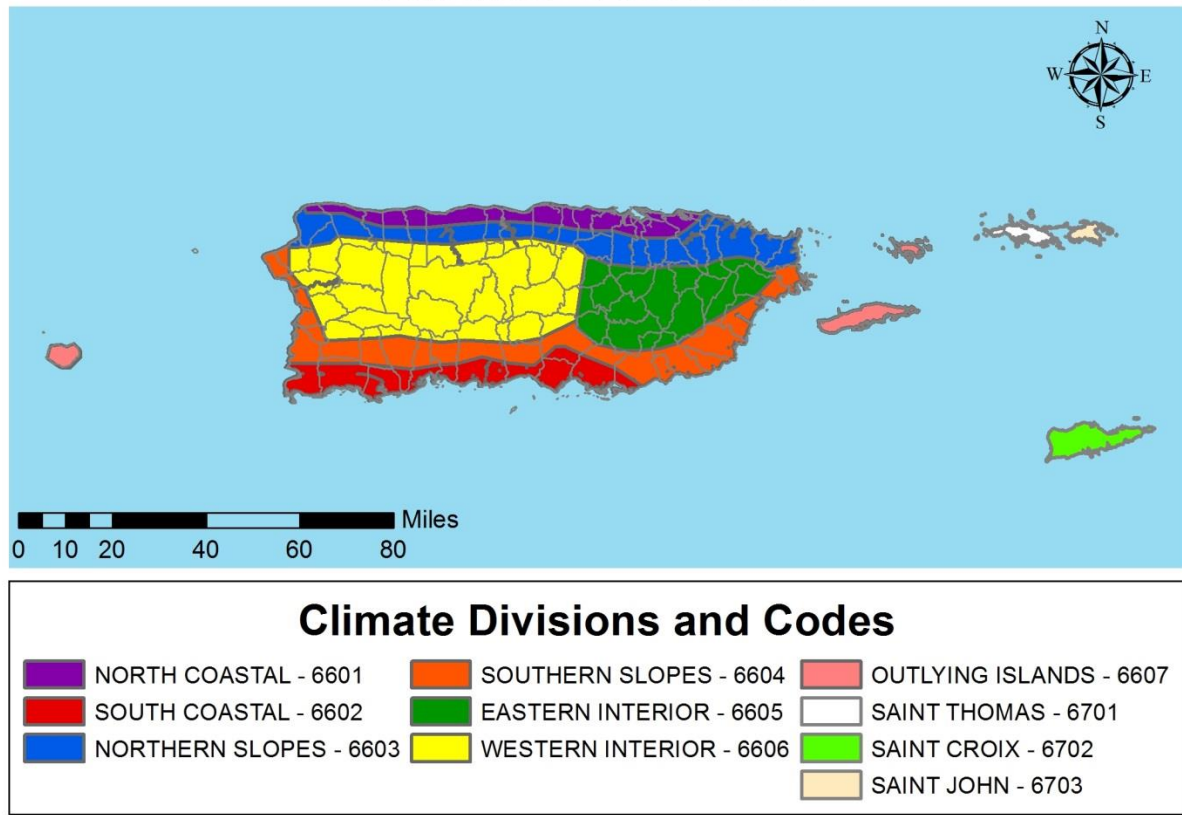
http://www.srh.noaa.gov/sju/?n=pr_usvi_normals





2015 Average Rainfall Accumulation per Climate Zones

Puerto Rico and U.S. Virgin Islands Climate Divisions



2015 Average Rainfall Accumulation per Climate Zones

North Coastal	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	3.98	3.81	2.73	1.82	---	---	---	---	---	---	---	---
NORMAL	4.06	2.96	2.87	5.16	---	---	---	---	---	---	---	---
%PON PER MONTH	98	129	95	35	---	---	---	---	---	---	---	---
ACCUMULATED	3.98	7.79	10.52	12.34	---	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	4.06	7.02	9.89	15.05	---	---	---	---	---	---	---	---
% PON ACCUMULATED	98	111	106	82	---	---	---	---	---	---	---	---

South Coastal	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	1.92	1.85	1.79	1.18	---	---	---	---	---	---	---	---
NORMAL	1.62	1.45	1.78	2.76	---	---	---	---	---	---	---	---
%PON PER MONTH	119	128	101	43	---	---	---	---	---	---	---	---
ACCUMULATED	1.92	3.77	5.56	6.74	---	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	1.62	3.07	4.85	7.61	---	---	---	---	---	---	---	---
% PON ACCUMULATED	119	123	115	89	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Northern Slopes	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	4.32	3.80	1.98	2.83	---	---	---	---	---	---	---	---
NORMAL	4.20	3.03	3.23	5.26	---	---	---	---	---	---	---	---
%PON PER MONTH	103	125	61	54	---	---	---	---	---	---	---	---
ACCUMULATED	4.32	8.12	10.10	12.93	---	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	4.20	7.23	10.46	15.72	---	---	---	---	---	---	---	---
% PON ACCUMULATED	103	112	97	82	---	---	---	---	---	---	---	---

Southern Slopes	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	2.39	2.84	2.00	1.47	---	---	---	---	---	---	---	---
NORMAL	2.00	1.86	2.28	3.91	---	---	---	---	---	---	---	---
%PON PER MONTH	120	153	88	38	---	---	---	---	---	---	---	---
ACCUMULATED	2.39	5.23	7.23	8.70	---	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	2.00	3.86	6.14	10.05	---	---	---	---	---	---	---	---
% PON ACCUMULATED	120	135	118	87	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Eastern Interior	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	4.34	5.83	2.70	1.89	---	---	---	---	---	---	---	---
NORMAL	4.69	3.92	3.90	5.26	---	---	---	---	---	---	---	---
%PON PER MONTH	93	149	69	36	---	---	---	---	---	---	---	---
ACCUMULATED	4.34	10.17	12.87	14.76	---	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	4.69	8.61	12.51	17.77	---	---	---	---	---	---	---	---
% PON ACCUMULATED	93	118	103	83	---	---	---	---	---	---	---	---

Western Interior	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	3.60	5.06	3.79	6.65	---	---	---	---	---	---	---	---
NORMAL	3.90	2.75	3.57	6.77	---	---	---	---	---	---	---	---
%PON PER MONTH	92	184	106	98	---	---	---	---	---	---	---	---
ACCUMULATED	3.60	8.66	12.45	19.10	---	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	3.90	6.65	10.22	16.99	---	---	---	---	---	---	---	---
% PON ACCUMULATED	92	130	122	112	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Mainland PR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	3.45	4.15	2.71	3.33	---	---	---	---	---	---	---	---
NORMAL	3.41	2.66	2.94	4.85	---	---	---	---	---	---	---	---
%PON PER MONTH	101	156	92	69	---	---	---	---	---	---	---	---
ACCUMULATED	3.45	7.60	10.31	13.64	---	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	3.41	6.07	9.01	13.86	---	---	---	---	---	---	---	---
% PON ACCUMULATED	101	125	114	98	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Saint Thomas/Saint John	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	1.46	3.92	1.26	0.54	---	---	---	---	---	---	---	---
NORMAL	2.72	1.71	1.47	2.92	---	---	---	---	---	---	---	---
%PON PER MONTH	54	229	86	18	---	---	---	---	---	---	---	---
ACCUMULATED	1.46	5.38	6.64	7.18	---	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	2.72	4.43	5.90	8.82	---	---	---	---	---	---	---	---
% PON ACCUMULATED	54	121	113	81	---	---	---	---	---	---	---	---

Saint Croix	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	2.17	1.66	0.96	1.93	---	---	---	---	---	---	---	---
NORMAL	2.00	1.61	1.53	2.47	---	---	---	---	---	---	---	---
%PON PER MONTH	109	103	63	78	---	---	---	---	---	---	---	---
ACCUMULATED	2.17	3.83	4.79	6.72	---	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	2.00	3.61	5.14	7.61	---	---	---	---	---	---	---	---
% PON ACCUMULATED	109	106	93	88	---	---	---	---	---	---	---	---

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April 2015 in Perspective

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Top 5 **Wettest**

Top 5 **Driest**

Islandwide

Year	Inches
Apr-03	12.38
Apr-60	10.82
Apr-02	10.62
Apr-05	8.82
Apr-63	8.58

Year	Inches
Apr-97	0.89
Apr-68	1.56
Apr-84	1.57
Apr-49	1.63
Apr-75	1.83

Mean Rainfall:
4.85 inches

Total rainfall accumulation:
3.33 inches

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April 2015 in Perspective

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Top 5 **Wettest**

Top 5 **Driest**

San Juan Metro Area

Year	Inches
2005	15.0
1915	13.17
1988	10.37
1940	10.23
2006	10.06

Year	Inches
1997	0.08
1984	0.28
1935	0.42
1968	0.5
1928	0.83

Mean Rainfall:
4.68 inches

Total rainfall accumulation:
1.38 inches

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Top 5 **Wettest**

Top 5 **Driest**

Cyril E. King Airport St Thomas

Year	Inches
2003	11.2
1978	6.66
1986	6.52
2007	6.22
1960	4.75

Year	Inches
1953	0.23
1985	0.48
2004	0.54
2000	0.57
1991	0.67

Mean Rainfall:
2.74 inches

Total rainfall
accumulation:
1.08 inches

April 2015
ended as the 8th
driest April on
record.



April 2015 in Perspective

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Top 5 **Wettest**

Henry E. Rohlsen Airport St Croix

Year	Inches
2003	8.53
1983	8.24
1952	5.38
1960	5.17
1956	4.89

Top 5 **Driest**

Year	Inches
1988	T
1997	0.02
2005	0.1
1953	0.22
2004	0.31

Mean Rainfall:
2.13 inches

Total rainfall
accumulation:
0.59 inches.

April 2015
ended as the 7th
driest April on
record.



April 2015 in Perspective

Wettest Days

Station	Inches	Date
CALERO CAMP	2.90	4/12/2015
MARICAO 2 SSW	2.88	4/7/2015
TRUJILLO ALTO 2 SSW	2.82	4/6/2015
ARECIBO OBSY	2.42	4/12/2015
HACIENDA CONSTANZA 2W	2.23	4/11/2015

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April 2015 Highlights for Primary Climatological Data Sites

Wettest Days

San Juan Metro Area

Inches	Date
0.46	4/10/2015
0.29	4/6/2015
0.17	4/9/2015
0.11	4/17/2015
0.1	4/13/2015

Cyril E. King AP/St Thomas

Inches	Date
0.57	4/4/2015
0.18	4/7/2015
0.13	4/12/2015
0.09	4/5/2015
0.03	4/25/2015

Henry E. Rohlsen AP/St. Croix

Inches	Date
0.39	4/18/2015
0.10	4/7/2015
0.05	4/8/2015
0.03	4/3/2015
0.01	4/23/2015

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Data retrieved from COOP stations and primary climatological data sites

TEMPERATURE

Islandwide climate record period: 1940 to 2015

San Juan Metro Area climate record period: 1898 to 2015 (Primary climatological site)

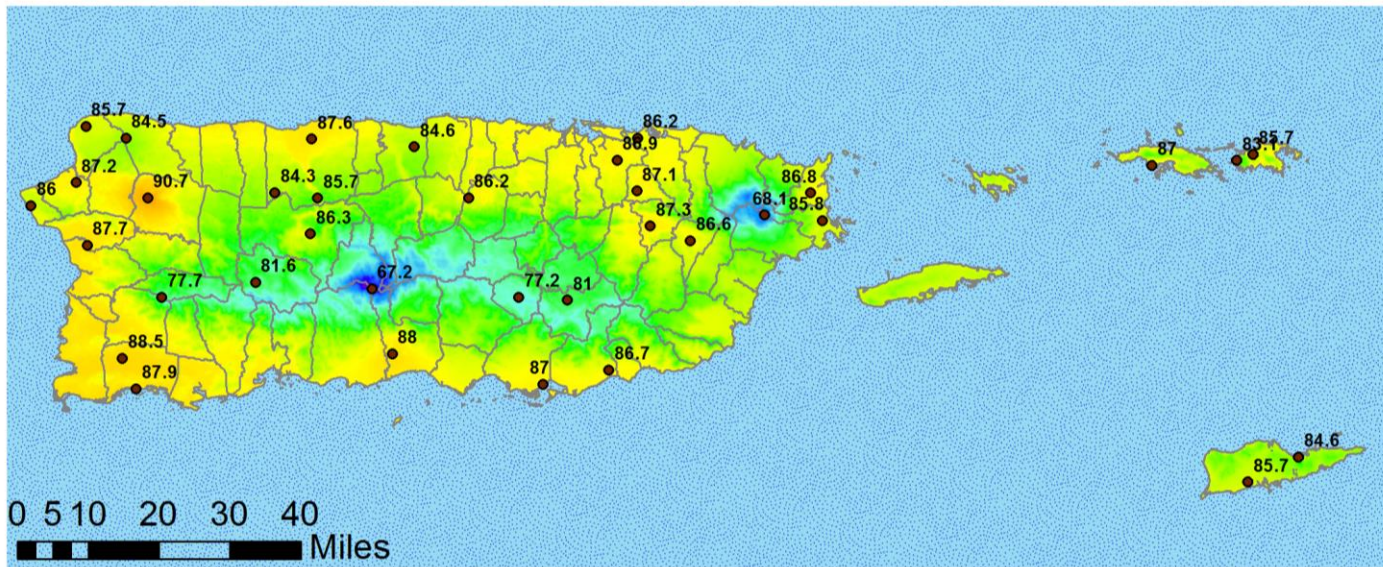
Cyril E. King Airport/St Thomas climate record period: 1953 to 2015 (Primary climatological site)

Henry E. Rohlsen Airport/St Croix climate record period: 1951 to 2015 (Primary climatological site)

Following WMO criteria: Less than 10% of missing values



National Weather Service WFO San Juan



Temperature Range °F



80

Low : 60

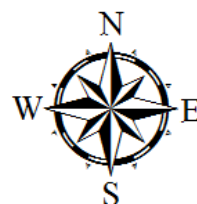
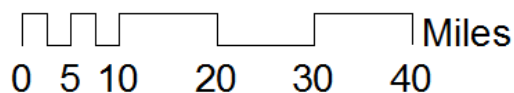
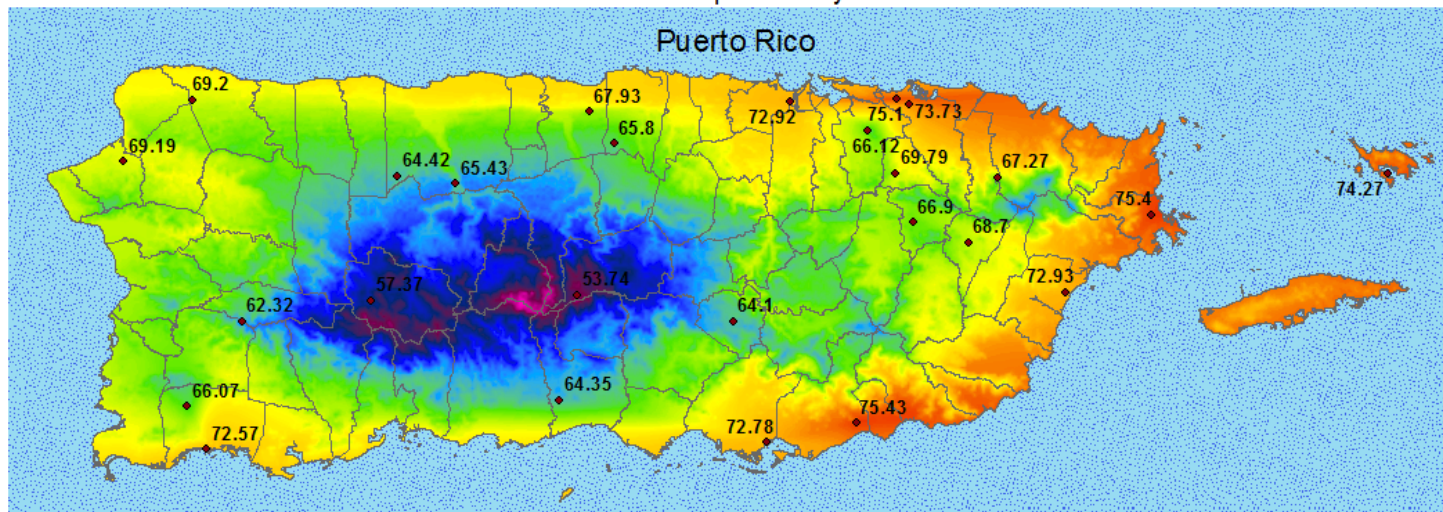




2015 April Mean Minimum Temperatures

National Weather Service WFO San Juan

Data is preliminary



Temperature Range °F

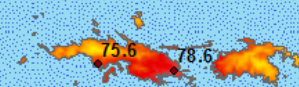


High : 80

65

Low : 50

Saint Thomas / Saint John



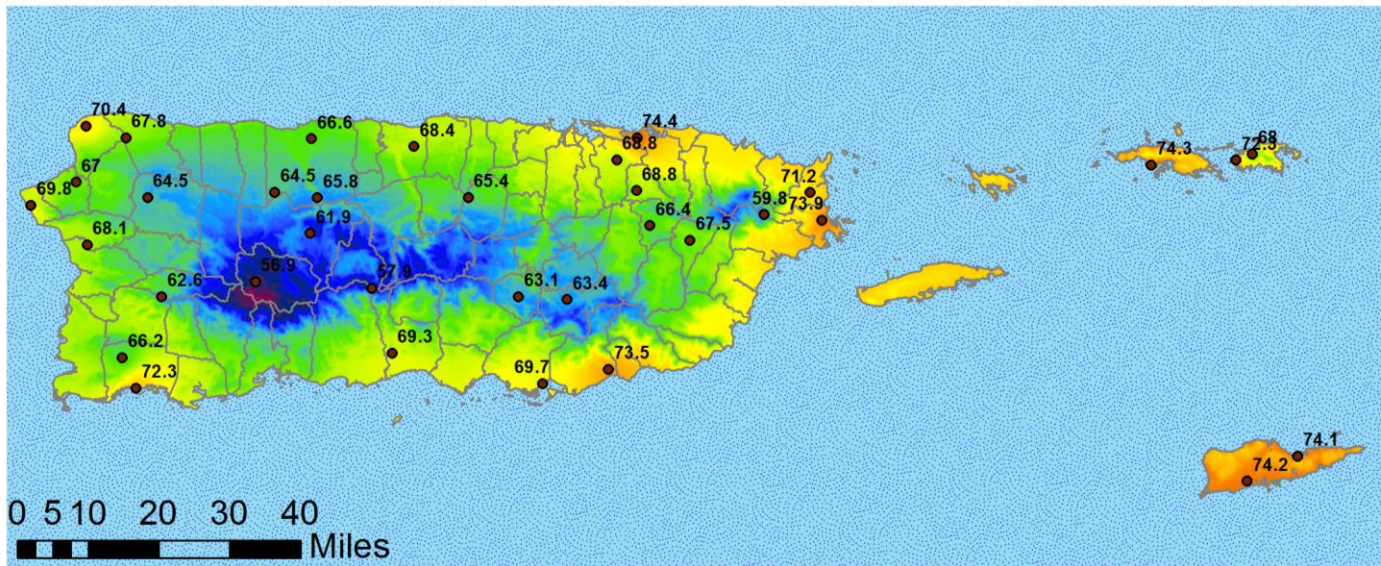
Saint Croix





April Normal Minimum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F



High : 80

65

Low : 50



April 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Top 5 Coolest

Islandwide

Year	°F
Apr-69	77.9
Apr-87	77.9
Apr-58	77.7
Apr-05	77.5
Apr-10	77.1

Year	°F
Apr-41	68.9
Apr-40	69.6
Apr-42	73.0
Apr-68	73.3
Apr-44	73.4

Mean Temperature:
75.8 °F

**Apr 2015 mean
temperature 76.9 °F**

Following are not included because do not WMO meet criteria , 56, 57, 59, 63, 67, 79, 80.



April 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

San Juan Metro Area

Year	°F
2014	82.5
1984	81.8
1983	81.7
2015	81.5
2005	81.5

Top 5 Coolest

Year	°F
1922	74.3
1921	74.6
1938	74.7
1945	75.0
1913	75.2

Mean Temperature:
80.3 °F

April 2015 ended as
the 4th warmest
April on record.



April 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Cyril E. King Airport St Thomas

Year	°F
1993	84.0
1995	83.2
1994	83.2
1979	82.4
1992	82.1

Top 5 Coolest

Year	°F
1955	77.4
2008	78.2
1956	78.4
1954	78.4
1976	78.6

Mean Temperature:
80.6 °F

Apr 2015 mean
temperature 80.4 °F



April 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Henry E. Rohlsen Airport St Croix

Year	°F
1958	82.0
1972	81.3
1987	81.3
2000	81.3
2005	81.2

Top 5 Coolest

Year	°F
1982	75.7
1955	76.6
1954	77.3
1979	77.9
1956	78.5

Mean Temperature:
80.0 °F

Apr 2015 mean
temperature 80.8 °F.

April 2015 ended as
the 7th warmest
April on record.



April 2015 Highlights

Highest **Maximum** Temps

Station	Value (°F)	Date
TOA BAJA LEVITOWN	98	4/27/2015
MANATI 2 E	96	4/30/2015
ISABELA SUBSTN	95	4/30/2015
WFO SAN JUAN	95	4/29/2015
DOS BOCAS	94	4/30/2015

Lowest **Minimum** Temps

Station	Value (°F)	Date
TORO NEGRO FOREST	50	4/22/2015
MARICAO 2 SSW	58	4/22/2015
LAJAS SUBSTATION	61	4/4/2015
AIBONITO	61	4/5/2015
TRUJILLO ALTO 2 SSW	61	4/6/2015



2015 Highlights for Primary Climatological Data Sites

Spring

	Mar	Apr	May	Season data til 4/30	YTD data til 4/30
San Juan	---	4 th warmest	---	driest	5 th warmest start to a year
Saint Thomas	---	8 th driest	---	2 nd driest	Wettest start to a year
Saint Croix	10 th driest	7 th driest and 7 th warmest	---	driest	4 th driest start to a year

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2015 Highlights for Primary Climatological Data Sites

Winter

	Dec (2014)	Jan	Feb	Season
San Juan	---	3 rd warmest	6 th warmest	5 th warmest
Saint Thomas	---	---	wettest February and 6 th wettest month	wettest
Saint Croix	8 th wettest	14 th driest	6 th warmest	---

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LOOKING AHEAD TOWARD MAY

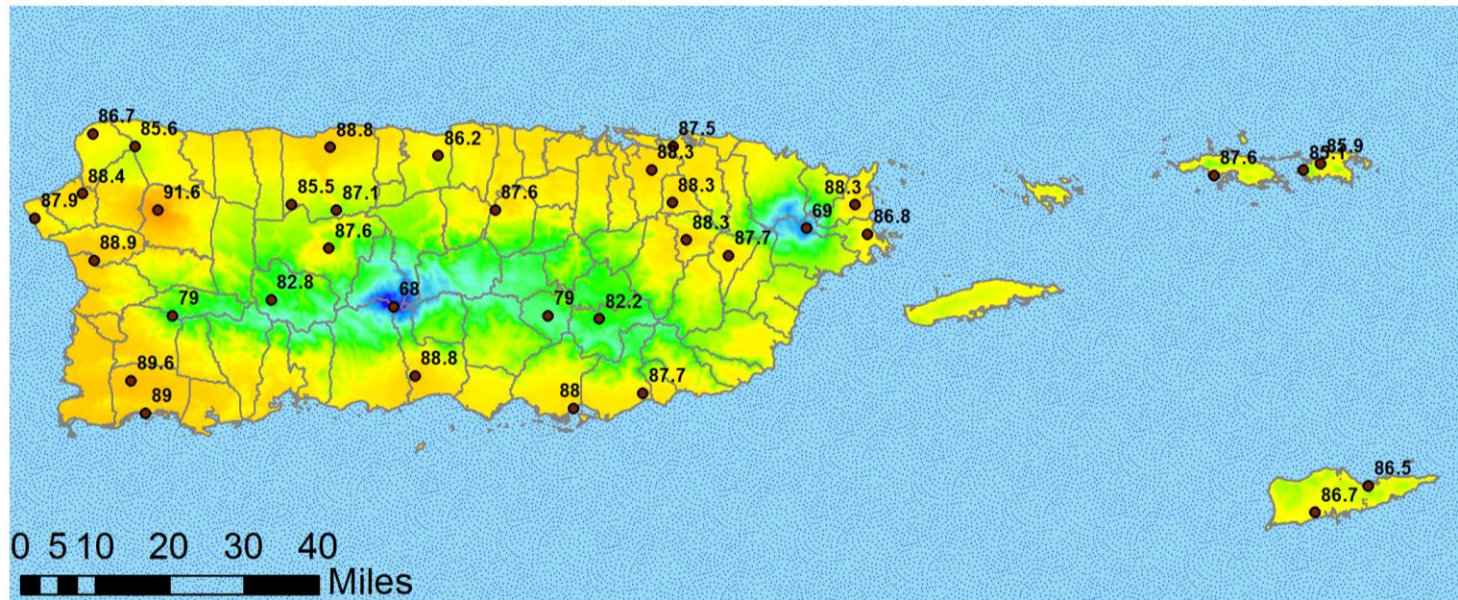


WFO

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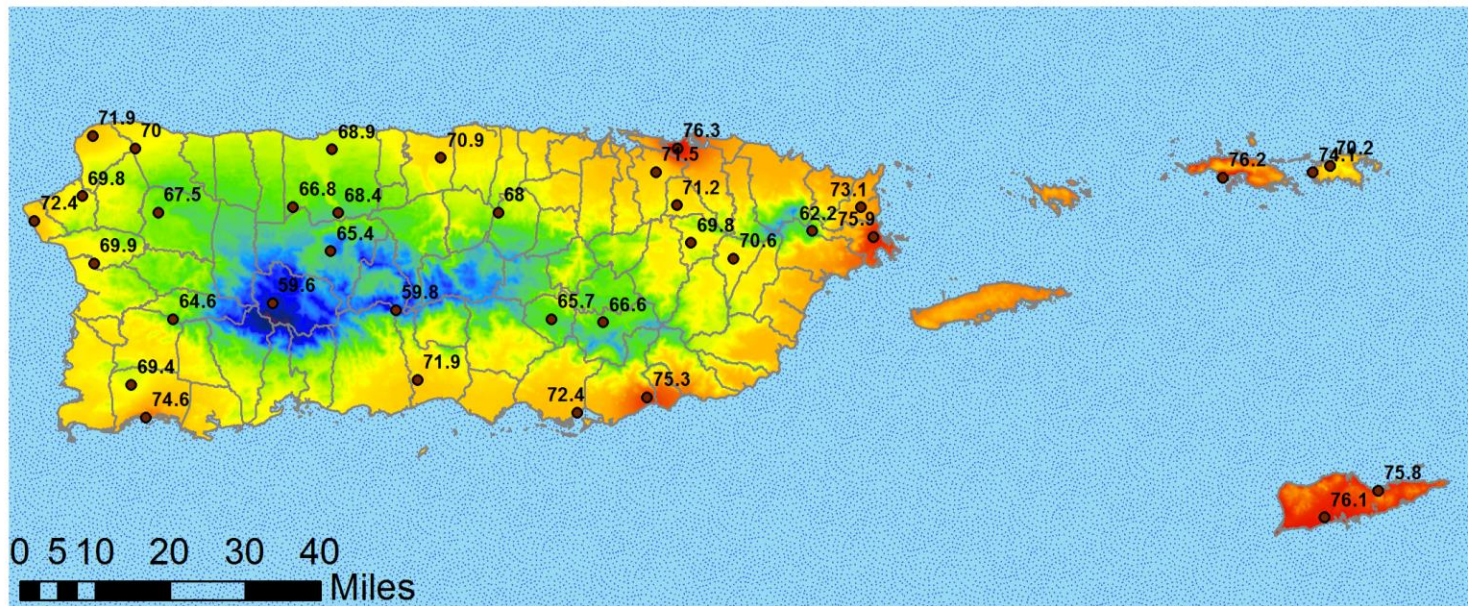
National Weather Service WFO San Juan



Low : 60



National Weather Service WFO San Juan



Temperature Range °F



Low : 50

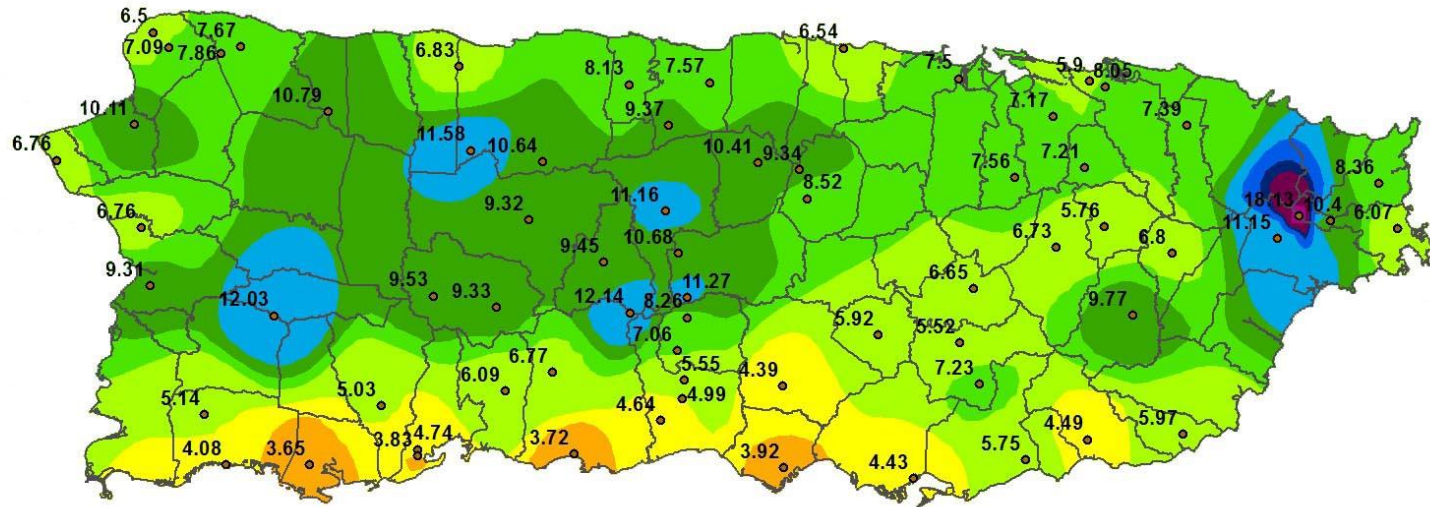




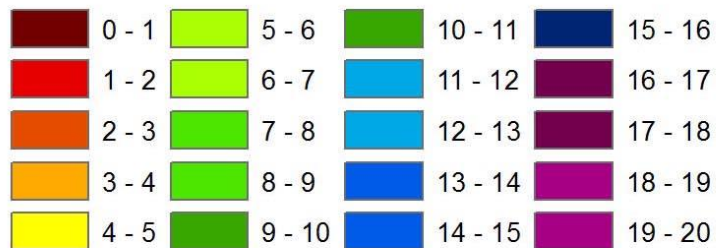
May Normal Rainfall 1981 - 2010



PUERTO RICO



Monthly Rainfall (Inches)



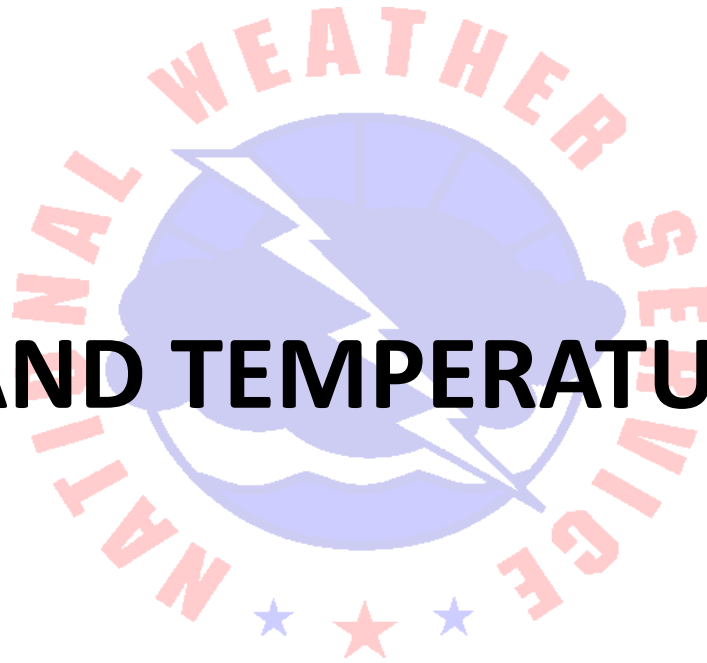
ST. THOMAS / ST. JOHN



ST. CROIX



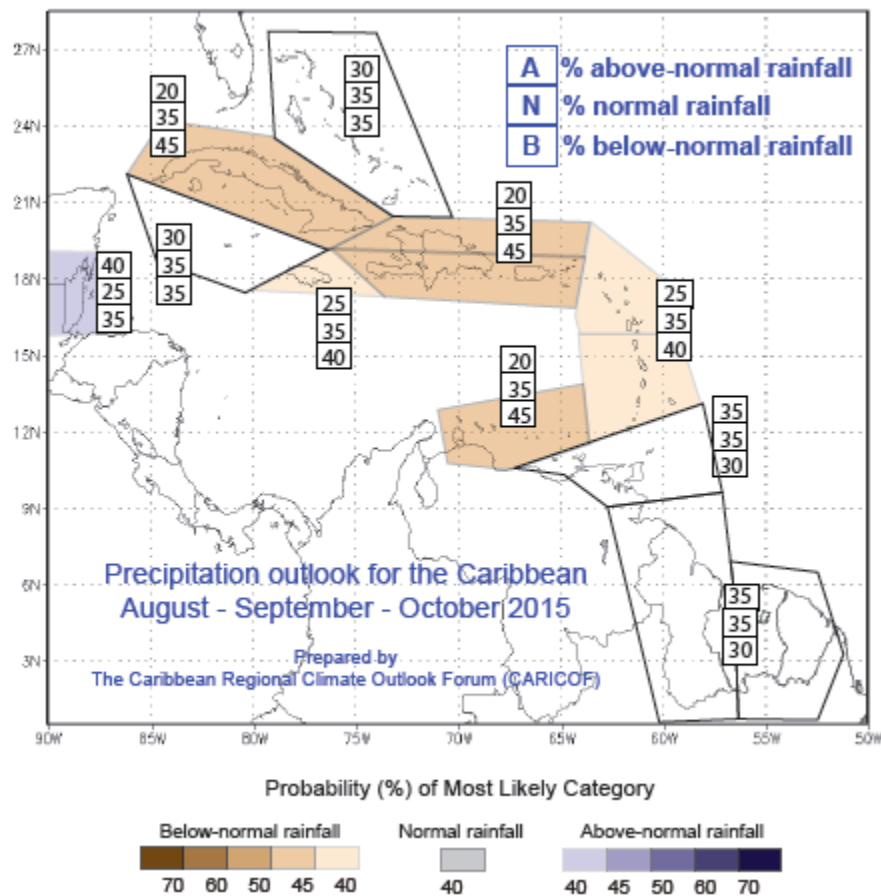
RAINFALL AND TEMPERATURE OUTLOOK



WFO

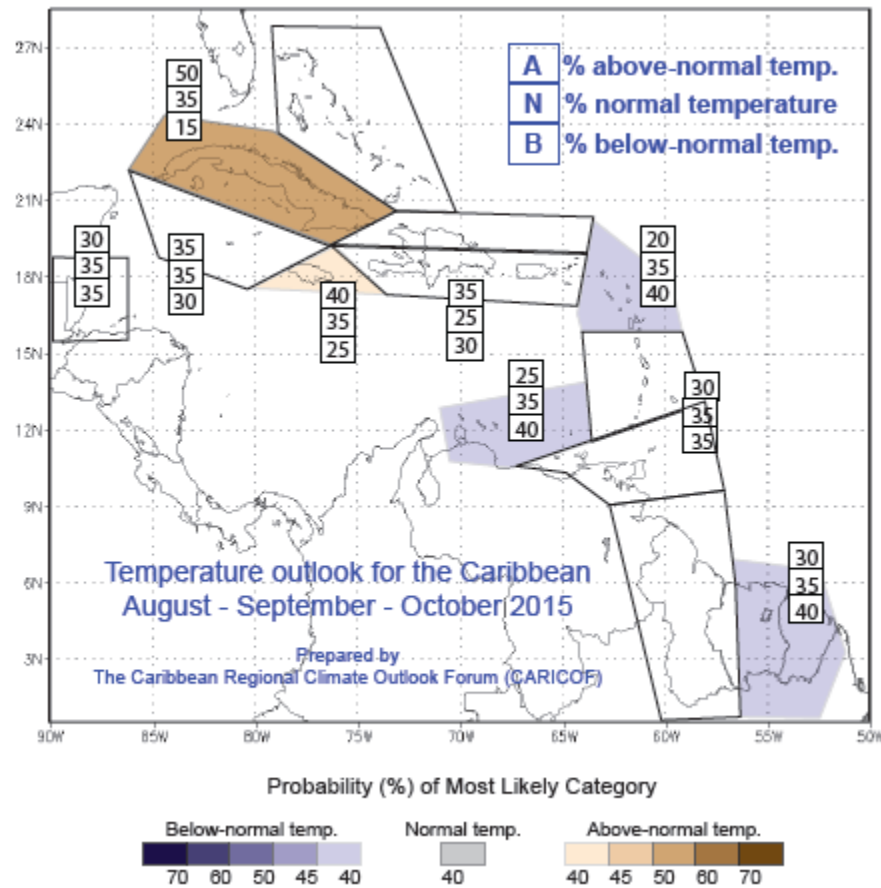
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<http://www.cimh.edu.bb/?p=precipoutlook>





<http://www.cimh.edu.bb/?p=precipoutlook>

